

Missouri Department of Natural Resources

PUBLIC NOTICE

DRAFT MISSOURI STATE OPERATING PERMIT



DATE: October 22, 2004

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed permit conditions are invited to submit them in writing to the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102, ATTN: Peter Goode, P.E., Chief, NPDES Permits and Engineering Section. Please include the permit number in all comment letters.

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see Curd v. Mo. Clean Water Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by November 22, 2004 or received in our office by 5:00 p.m. on November 25, 2004. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <http://www.dnr.mo.gov/wpscd/wpcp/homewpcp.htm>, or at the Department of Natural Resources, Water Protection Program, 205 Jefferson Street, P.O. Box 176, Jefferson City, Missouri 65102, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Public Notice Date: October 22, 2004
Permit Number: MO-0000809
Southeast Regional Office

FACILITY NAME AND ADDRESS	NAME AND ADDRESS OF OWNER
Lone Star Industries, Inc. 2524 S. Sprigg Street Cape Girardeau, MO 63703	Lone Star Industries, Inc. P.O. Box 520 Cape Girardeau, MO 63702
RECEIVING STREAM & LEGAL DESCRIPTION	TYPE OF DISCHARGE
Mississippi River (Mississippi River)and Cape LaCroix Creek (Cape LaCroix Creek) Secs. 7, 18, & 19, T30N, R14E, Cape Girardeau County	Domestic and Industrial, reissuance

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 86th Congress) as amended,

Permit No.: MO-0000809

Owner: Lone Star Industries, Inc.
Address: P.O. Box 520, Cape Girardeau, MO 63702

Continuing Authority: Same as above
Address: Same as above

Facility Name: Lone Star Industries, Inc.
Address: 2524 S. Sprigg Street, Cape Girardeau, MO 63703

Legal Description: Secs. 7, 18 and 19, T30N, R14E, Cape Girardeau County

Receiving Stream: #001-#003 Mississippi River (P); #004-Cape LaCroix Creek (P)
First Classified Stream and ID: #001-#003 Mississippi River (P); #004-Cape LaCroix Creek (P)
USGS Basin & Sub-watershed No.: (07140105-150003)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

See page 2

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

Effective Date

Stephen M. Mahfood, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Expiration Date
MO 780-0041 (10-93)

Jim Hull, Director of Staff, Clean Water Commission

LEGAL DESCRIPTION

Outfall #001 – Center of Sec. 19, T30N, R14E, Cape Girardeau County

Outfall #002 – NE $\frac{1}{4}$, Sec. 18, T30N, R14E, Cape Girardeau County

Outfall #003 – SW $\frac{1}{4}$, NE $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 18, T30N, R14E, Cape Girardeau County

Outfall #004 – SW $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 7, T30N, R14E, Cape Girardeau County

Outfall #001 – Cement Plant/Quarry SIC #3241

Stormwater runoff, quarry dewatering

Effluent from Outfall #003.

Design flow is 1.36 MGD.

Actual flow is rainfall dependent.

Outfall #002 – Stormwater Runoff SIC #1300

Stormwater Runoff from gypsum and silica stock piles.

Flow dependent upon precipitation.

Outfall #003 – Domestic Sanitary Flows – SIC #4952

Extended Aeration/Sludge disposal is by contract hauler.

Design population equivalent is 120.

Actual flow is 2,700 gallons per day. Design flow is 5,000 gallons per day.

Design Sludge production is 2.52 dry tons/year.

Outfall #004 – Emergency pit dewatering/stormwater runoff

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 6	
					PERMIT NUMBER MO-0000809	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001 (Note 1)						
Flow	MGD	*			once/quarter**	24 hr. estimate
Temperature	°F	90		90	once/quarter**	grab
Total Suspended Solids	mg/L	50		50	once/quarter**	grab
pH – Units		*		****	once/quarter**	grab
Oil & Grease	mg/l	15		10	once/quarter**	grab
Outfall #002 (Note 2)						
Flow	MGD	*			once/quarter**	24 hr. estimate
Temperature	°F	90°		90°	once/quarter**	grab
Total Suspended Solids	mg/L	50		50	once/quarter**	grab
pH – Units	SU	****		****	once/quarter**	grab
Outfall #003 (Note 3)						
Flow	MGD	*		*	once/year in August	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		45	30	once/year in August	grab
Total Suspended Solids	mg/L		45	30	once/year in August	grab
pH – Units	SU	****		****	once/year in August	grab
Outfall #004						
Flow	MGD	*		*	once/discharge/day	24 hr. estimate
Total Suspended Solids	mg/L	50		50	once/discharge/day	grab
pH – Units	SU	****		****	once/discharge/day	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** Sample once per quarter in the months of February, May, August, and November.
- *** Reserved.
- **** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

Note 1- The 300-acre borrow pit which ultimately receives the wastewater from Outfall #001 and Outfall #003 do not have a surface discharge point. Wastewater is pumped from the inlet structure to the borrow pit. If the inlet structure and borrow pit are flooded by the Mississippi River during the quarter, report "Flooded" and the months during which flooding conditions existed.

Note 2- Sampling shall be done once per quarter during a precipitation event of the quarter that causes stormwater runoff to the preliminary gypsum and silica storage area. If the area of stockpiling is flooded by the Mississippi River during the quarter, report "FLOODED" and the month or months during which flooding conditions existed.

Note 3- Sampling for Outfall #003 will be from the effluent of the extended aeration plant.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is adopted for the receiving waters which are currently included in Missouri's list of waters of the state not achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued by the permittee shall also contain any other requirements of the Clean Water Act then applicable.

2. All outfalls must be clearly marked in the river.
3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
4. This permit may be reopened and modified or alternatively revoked and reissued, to incorporate new or modified effluent limitations or other conditions, if the result of a wasteload allocation study, toxicity test, or other information indicates changes are necessary to ensure compliance with Missouri's Water Quality Standards.
5. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 ug/L);
 - (2) Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
6. Report as no-discharge when a discharge does not occur during the report period.
 7. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;

C. SPECIAL CONDITIONS (continued)

7. General Criteria. (continued)

- (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
- (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
- (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
- (e) There shall be no significant human health hazard from incidental contact with the water;
- (f) There shall be no acute toxicity to livestock or wildlife watering;
- (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
- (h) Waters shall be free from used tires, car bodies, appliances, debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, Section 10, Mo., except as the use of such materials is specifically permitted under Section 60.2, R.S.Mo.

8. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities

- (a) Permittee shall comply with the pollution abatement, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
- (b) If sludge is not removed by a contract hauler, Permittee is authorized to land apply biosolids that are removed from the domestic wastewater treatment lagoon during lagoon cleanout and maintenance activities. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids from the lagoon. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

WATER QUALITY REVIEW SHEET
Determination of Effluent Limits

FACILITY INFORMATION

Facility Name: Lone Star Industries, Inc.

NPDES #: MO-0000809

Facility Type/Description: Cement Plant

8-Digit Huc: 07140105

County: Cape Girardeau

Legal Description: Secs. 7, 18 and 19, T30N, R14E

Latitude/Longitude: _____

Water Quality History And Special Problems: Bypass May 2002, due to sink hole opening

OUTFALL CHARACTERISTICS

Outfall	Design Flow (Cfs)	Treatment Type	Receiving Waterbody	Main Contaminant Of Concern
001	1.36 MGD	None	Mississippi River	Total Suspended Solids (TSS)
				Temperature
002	0.002 MGD	Settling	Mississippi River	TSS
003	0.004 MGD	Extended Aeration	Mississippi River	TSS, Biochemical Oxygen Demand
004	Intermittent	None	Cape LaCroix Creek	TSS

RECEIVING WATERBODY INFORMATION

Waterbody	Class	7q10(Cfs)	*Designated Uses	Other Characteristics
Mississippi River	P	41,000	Irr, btg, lww, dws	
Cape La Croix	P	unknown	lww, aql	

*Cool water fishery (clf), cold water fishery (cdf), irrigation (irr), industrial (ind), boating & canoeing (btg), drinking water supply (dws), whole body contact recreation (wbc), protection of warmwater aquatic life and human health (aql), livestock & wildlife watering (lww)

PERMIT LIMITS AND INFORMATION

TMDL Watershed:	Yes	___	No	<u>X</u>	Disinfection Waiver:	Yes	___	No	<u>X</u>	NA	___
W.L.A. Study Conducted:	Yes	___	No	<u>X</u>	303d Waterbody:	Yes	<u>X</u>	No	___	NA	___
Disinfection Required:	Yes	___	No	<u>X</u>	Violations:	Yes	___	No	___		

Receiving Water Monitoring Requirements

Outfall #001

Wet Test: Yes ☒ No ☐ Frequency: Yearly A.E.C. 100 Limit: No. sig. mort.

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
Temperature	90 F		90 F
TSS	50 mg/L		50 mg/L
Oil and Grease	15 mg/L		10 mg/L
pH - Units	6-9		6-9
Flow (MGD)	*		*

Outfall #002

Wet Test: Yes ☐ No ☒ Frequency: _____ A.E.C. _____ Limit: _____

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
Temperature	90°F		90°F
TSS	50 mg/L		50 mg/L
pH - Units	6-9		6-9
Flow (MGD)	*		*

Outfall #003

Wet Test: Yes ☐ No ☒ Frequency: _____ A.E.C. _____ Limit: _____

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
Biochemical Oxygen Demand		45 mg/L	30 mg/L
TSS		45 mg/L	30 mg/L
pH - Units	6-9		6-9
Flow (MGD)	*		*

Outfall #004

Wet Test: Yes ☐ No ☒ Frequency: _____ A.E.C. _____ Limit: _____

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
TSS	50 mg/L		50 mg/L
pH - Units	6-9		6-9
Flow (MGD)	*		*

Derivation and Discussion of Limits

Reviewer: Tim Stallman

Date: August 9, 2004

Unit Chief: Richard J. Laux

Monitoring and effluent limits contained within this document have been developed in accordance with EPA guidelines using the best available data and are believed to be consistent with Missouri's Water Quality Standards and Effluent Regulations. If additional water quality data or anecdotal information are available that may affect the recommended monitoring and effluent limits, please forward these data and information to the author.

Date of Public Notice: October 22, 2004

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
FACT SHEET

This Fact Sheet explains the applicable regulations, rationale for development of this permit and the public participation process.

NPDES PERMIT NUMBER: MO-0000809

FACILITY NAME: Lone Star Industries, Inc.

OWNER NAME: Lone Star Industries, Inc.

LOCATION: Sec. 7, 18 & 19 T30N R14E County: Cape Girardeau

RECEIVING STREAM: Mississippi River

FACILITY CONTACT PERSON: Rich Baker TELEPHONE: (573) 335-5591

FACILITY DESCRIPTION AND RATIONALE

It has been determined that this facility does not discharge process water, therefore the limits at 40 CFR 411.12 do not apply. Limits for TSS are from 411.32.

This permit will be issued for 5 years.